DENON

Hi-Fi FM Stereo/Tuner

SERVICE MANUAL

MODEL TU-355

SOLID STATE FM STEREO TUNER

NIPPON COLUMBIA CO.,LTD

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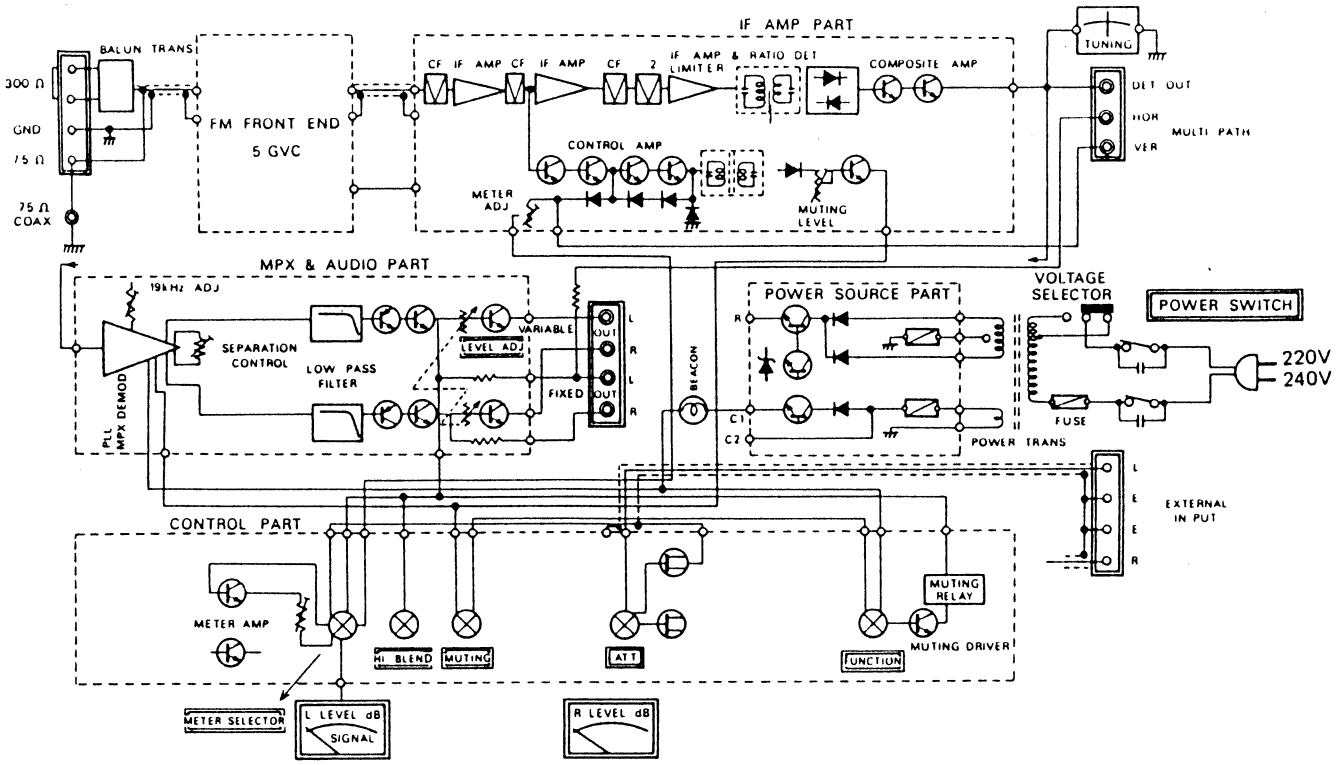
SPECIFICATIONS

CIRCUIT SYSTEM:	Super heterodyne
Tuning Range:	87.4 – 108MHz
Intermediate Frequency:	10.7MHz
Usable Sensitivity:	1.8μV (IHF)
Signal to Noise Ratio:	80dB
AM Suppression:	60dB
Capture Ratio:	1.0dB
Effective Selectivity:	85dB
Image Rejection:	120dB
IF Rejection:	110dB
Spurious Response:	110dB
Frequency Response:	20Hz–15kHz +0.2dB –1.5dB
Total Harmonic Distortion:	(MONO) 1kHz 0.15%, 50Hz–10kHz 0.3% (STEREO) 1kHz 0.2%, 50Hz–5kHz 0.4%
FM Stereo Separation:	1kHz 45dB 100Hz–10kHz 40dB
Carrier Leak (19kHz & 38kHz):	75dB
OUTPUT VOLTAGE	
Fixed Output (FIXED):	1.1V (100% modulation)
Output Impedance:	4.7 kohm
Variable Output (VARIABLE):	0–1.7V
Output Impedance:	1 kohm
LEVEL METERS	
Indication Error:	±0.2dB (EXT. INPUT –20–+30dB) 1kHz
Frequency Response:	20Hz–15kHz ±0.5dB

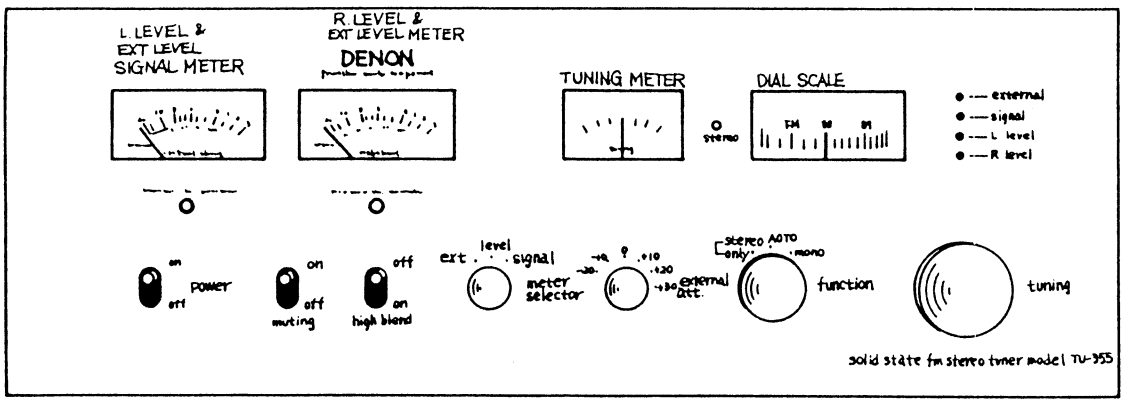
CONNECTOR TERMINALS:	Antenna (300 ohms, 75 ohms terminals & & 750 ohms coaxial connector) Multi-path Detection Fixed Output (fixed) Variable Output (VARIABLE) Level Meter Inputs
OPERATION KNOBS:	Power Switch Function (STEREO ONLY, AUTO, MONO) Level Meter External Input Attenuator Tuning knob Muting Hi. Blend Meter Selector (EXTERNAL, LEVEL, SIGNAL)
POWER REQUIREMENT:	220V/240V, 50Hz/60Hz (Internal switching)
POWER CONSUMPTION:	16W
DIMENSIONS:	396W x 147H x 281D (mm)
WEIGHT:	6.8kg.

BLOCK DIAGRAM

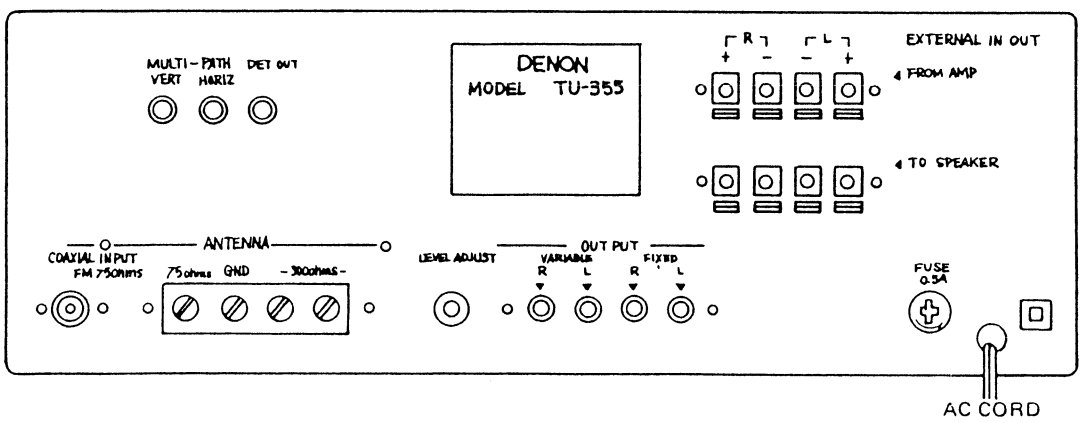


THE VIEW OF FRONT, BACK PANEL AND TOP, BOTTOM VIEW

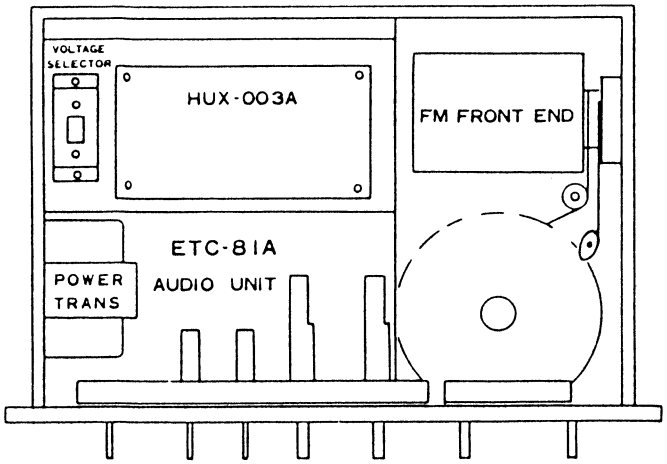
FRONT PANEL



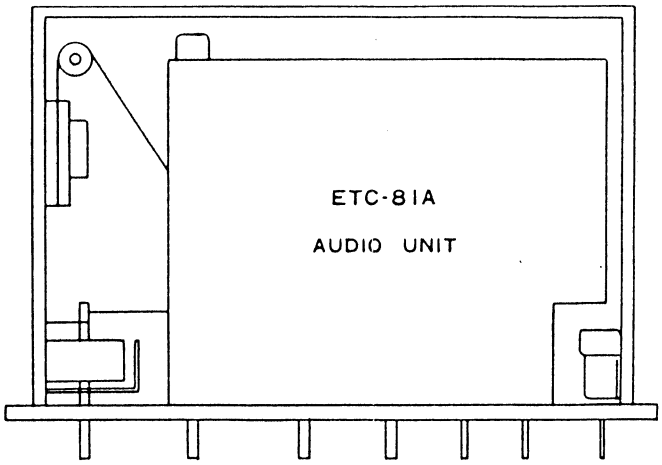
BACK PANEL



TOP VIEW

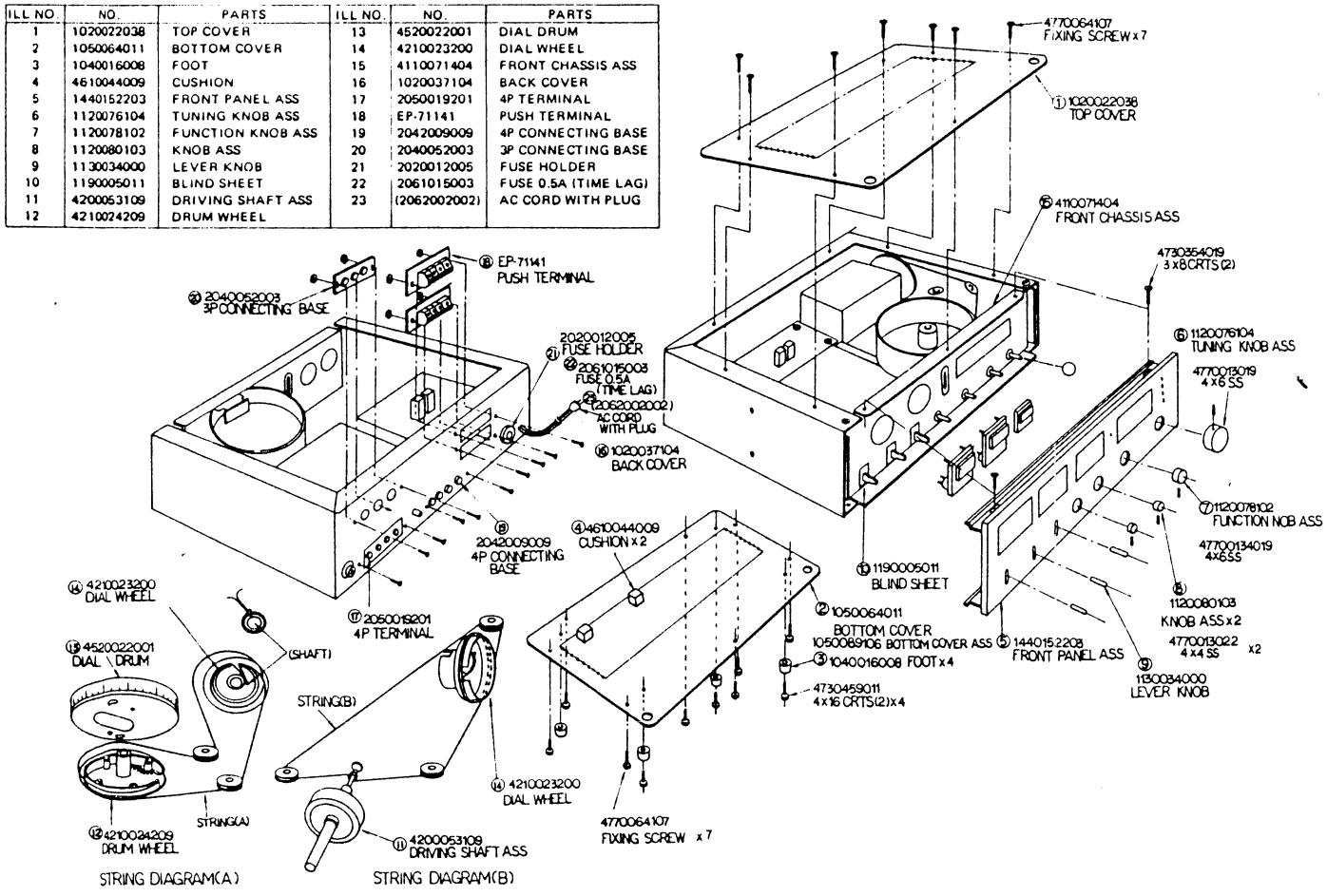


BOTTOM VIEW



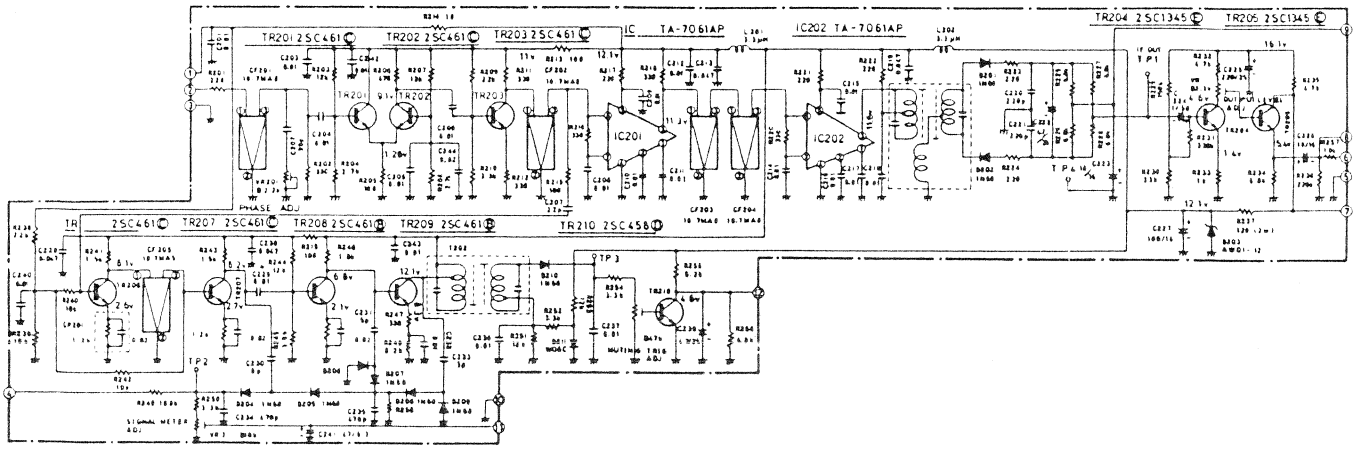
DISASSEMBLY INSTRUCTIONS

ILL NO.	NO.	PARTS	ILL NO.	NO.	PARTS
1	1020022038	TOP COVER	13	4520022001	DIAL DRUM
2	1050064011	BOTTOM COVER	14	4210023200	DIAL WHEEL
3	1040016008	FOOT	15	4110071404	FRONT CHASSIS ASS
4	4610044009	CUSHION	16	1020037104	BACK COVER
5	1440152203	FRONT PANEL ASS	17	2050019201	4P TERMINAL
6	1120076104	TUNING KNOB ASS	18	EP-71141	PUSH TERMINAL
7	1120078102	FUNCTION KNOB ASS	19	2042009009	4P CONNECTING BASE
8	1120080103	KNOB ASS	20	2040052003	3P CONNECTING BASE
9	1130034000	LEVER KNOB	21	2020012005	FUSE HOLDER
10	1190005011	BLIND SHEET	22	2061015003	FUSE 0.5A (TIME LAG)
11	4200053109	DRIVING SHAFT ASS	23	(2062002002)	AC CORD WITH PLUG
12	4210024209	DRUM WHEEL			

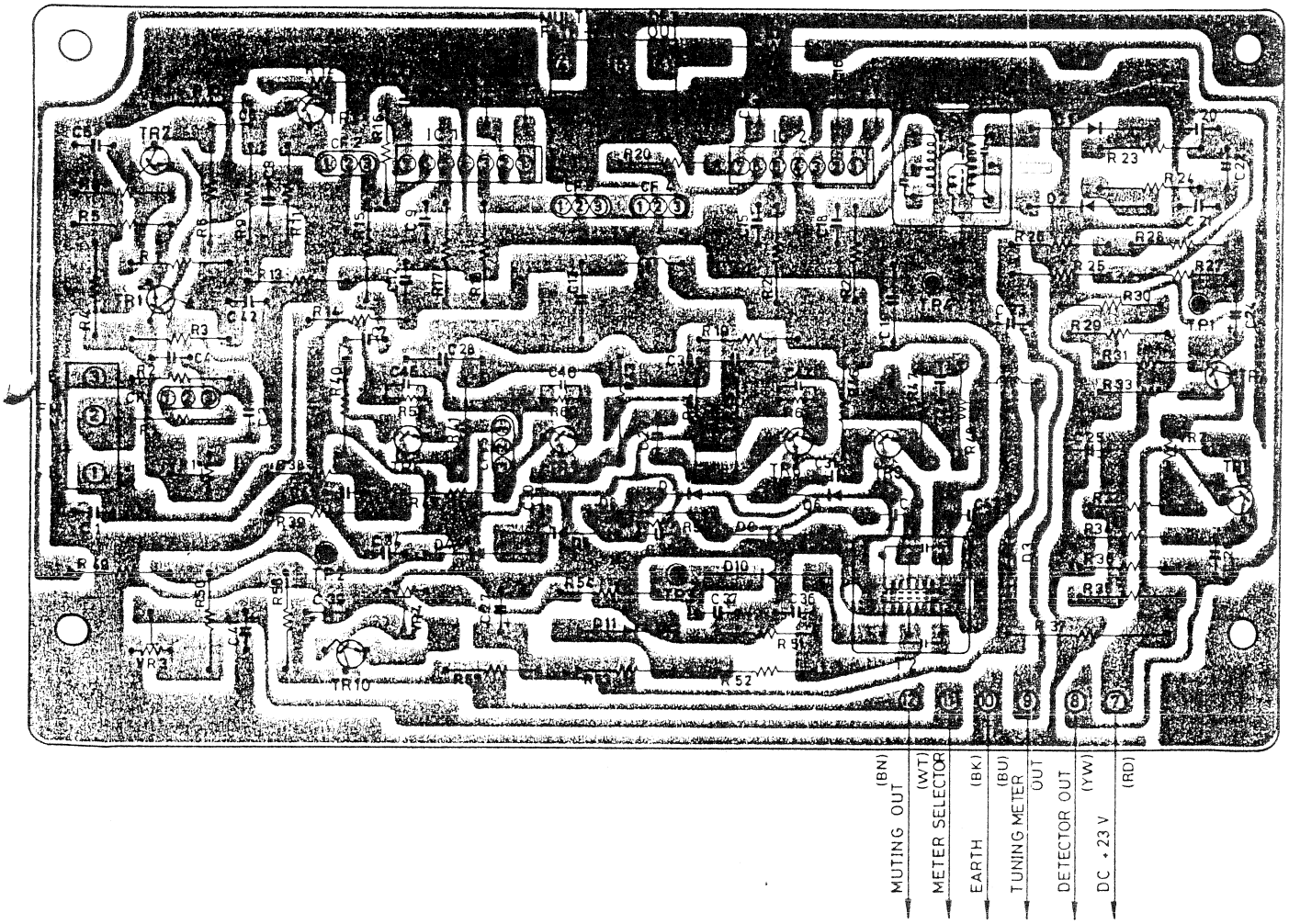


CIRCUIT DIAGRAM, PRINTED CIRCUIT BOARD PATTERN AND PARTS LIST
(THE BOARD DIAGRAM REPRESENTS THE VIEW FROM THE COPPER FOIL SIDE)

HUX-003A WIRING DIAGRAM



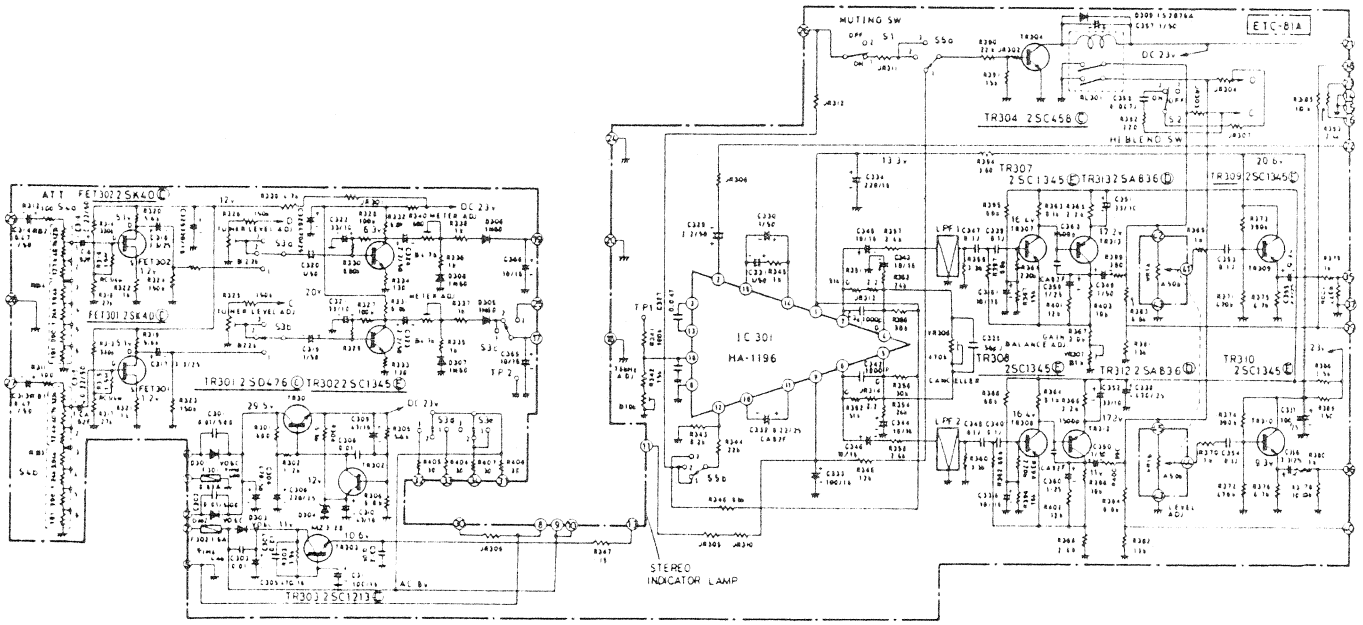
HUX-003A IF UNIT



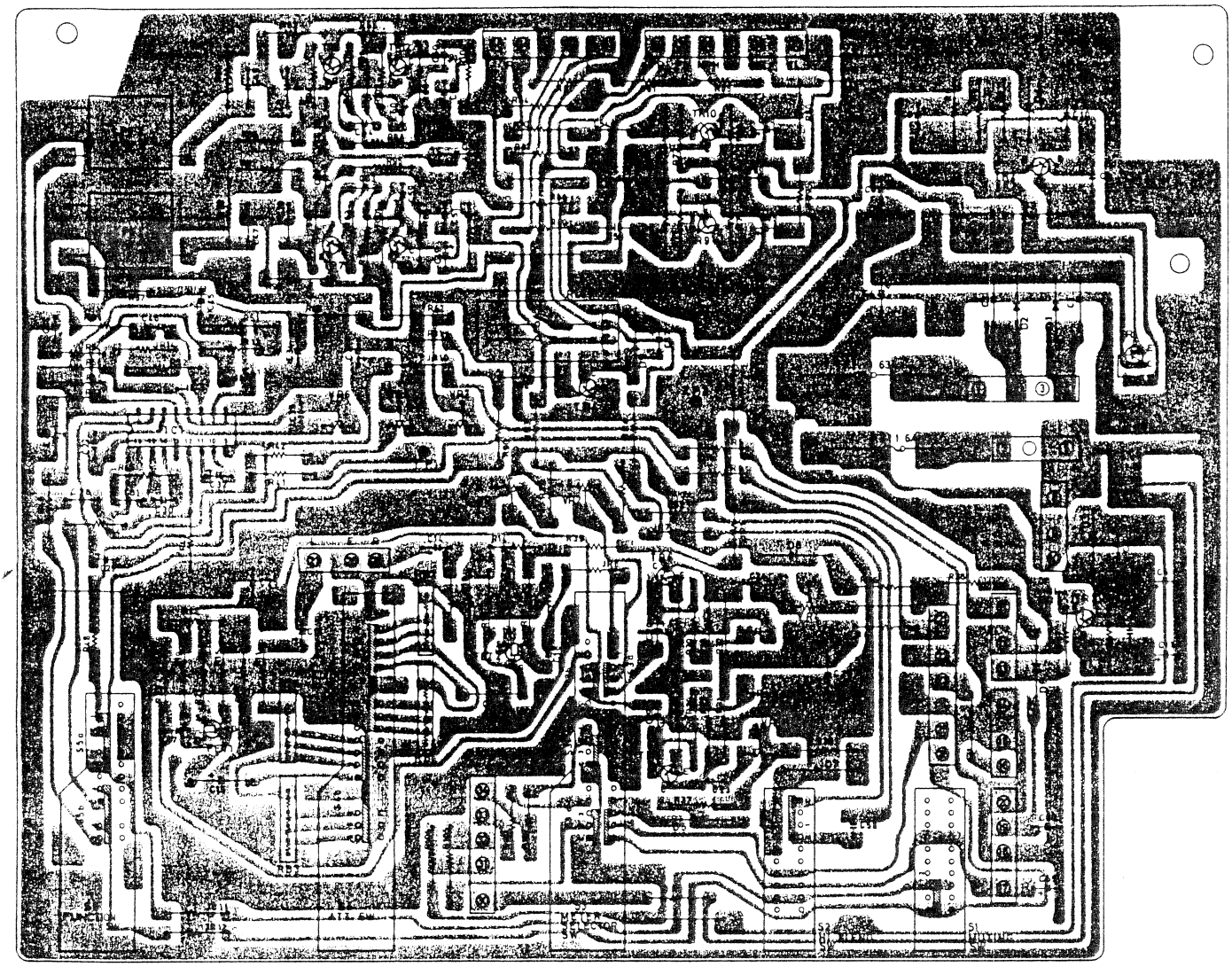
HUX-003A IF UNIT PARTS LIST

Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
C1,3,4,5,6,8,9,10,11,12,14,15,16,17,18,29,32,36,37,40,42,43,45,46,47	2531024016	CK45F1H103ZF	0.01μF 50V Ceramic Capacitor	R29	2410366015	RD14B2E154JF	150 Kohm 1/4W Carbon Film Resistor
				R30	2410350018	RD14B2E333JF	33 Kohm 1/4W Carbon Film Resistor
				R31	2410374010	RD14B2E334JF	330 Kohm 1/4W Carbon Film Resistor
				R32,35	2410330012	RD14B2E472JF	4.7 Kohm 1/4W Carbon Film Resistor
				R33	2410314012	RD14B2E102JF	1.0 Kohm 1/4W Carbon Film Resistor
				R36	2410370014	RD14B2E224JF	220 Kohm 1/4W Carbon Film Resistor
				R37	2440087018	RS14B3D121JNBF	120 Ohm±5% 2W Metal Oxide Film Resistor
C2	2533652017	CC45SL1H 390KF	39PF±10% 50V Ceramic Capacitor	R39,40,42	2410338014	RD14B2E103JF	10 Kohm±5% 1/4W Carbon Film Resistor
C7	2533649017	CC45SL1H220KF	22PF±10% 50V Ceramic Capacitor	57			
C13,19,28,38	2531026014	CK45F1H473ZF	0.047μF 50V Ceramic Capacitor	R41,43	2410318018	RD14B2E152JF	1.5 Kohm 1/4W Carbon Film Resistor
				R45	2410328011	RD14B2E392JF	3.9 Kohm 1/4W Carbon Film Resistor
				R46	2410320019	RD14B2E182JF	1.8 Kohm 1/4W Carbon Film Resistor
C20,21	2533661011	CC45SL1H221KF	220PF±10% 50V Ceramic Capacitor	R48,55	2410336016	RD14B2E822JF	8.2 Kohm 1/4W Carbon Film Resistor
C22,39	2544024016	CE04W1E4R7=F	4.7μF 25V Electrolytic Capacitor	R49	2410362019	RD14B2E104JF	100 Kohm 1/4W Carbon Film Resistor
C23,26	2544015012	CE04W1C100=F	10μF 16V Electrolytic Capacitor	R58	2410338001	RD14B2E103J	10 Kohm 1/4W Carbon Film Resistor
C24	2544044012	CE04W1H010=F	1μF 50V Electrolytic Capacitor	R59,60,61	2410316007	RD14B2E122J	1.2 Kohm 1/4W Carbon Film Resistor
C25	2544029011	CE04W1E221=F	220μF 25V Electrolytic Capacitor	VR1	EP 5462H9	Solid Volume	B-2.2 Kohm Variable Resistor
C27	2544018019	CE04W1C101=F	100μF 16V Electrolytic Capacitor	VR2	EP 5462H10	Solid Volume	B-3.3 Kohm Variable Resistor
C30	2533599015	CC45SL1H060DF	6PF±0.5PF 50V Ceramic Capacitor	VR3	EP 5462H13	Solid Volume	B-10 Kohm Variable Resistor
C31	2533598016	CC45SL1H050DF	5PF±0.5PF 50V Ceramic Capacitor	VR4	EP 5462H17	Solid Volume	B-47 Kohm Variable Resistor
C33	2533596018	CC45SL1H030CF	3PF±0.25PF 50V Ceramic Capacitor		2220211101	P.C Board	Printed Circuit Board
C34,35	2533665017	CC45SL1H471KF	470PF±10% 50V Ceramic Capacitor		2040031011	6P Connector Ass	
C41	2544002012	CE04W0J470=F	47μF 6.3V Electrolytic Capacitor		2034013003	3P Connector Pin Ass	
R1,17,21,22,23,24	2410298015	RD14B2E221JF	220 Ohm±5% 1/4W Carbon Film Resistor	T1	2312001009	Ratio Trans Ass	
				T2	2312002105	FM IFT Ass	
R2,11,12,16,18,20,47	2410302011	RD14B2E331JF	330 Ohm±5% 1/4W Carbon Film Resistor	CF1,2,3,4,5	2610006007	Ceramic Filter	10.7 MHz Ceramic Filter
				L1,2	TRT-09956	Inductor	3.3μH Inductor
R3,7,44,51,53	2410340015	RD14B2E123JF	12 Kohm±5% 1/4W Carbon Film Resistor	IC1,2	2630019029	TA 7061AP	Integrated Circuit
				TR1,2,3,6,7	2730025023	2SC461 (C)	Transistor
R4,8	2410324015	RD14B2E272JF	2.7 Kohm 1/4W Carbon Film Resistor				
R5	2410296017	RD14B2E181JF	180 Ohm 1/4W Carbon Film Resistor	TR4,5	2730116013	2SC1345 (E)	Transistor
R6	2410306017	RD14B2E471JF	470 Ohm 1/4W Carbon Film Resistor	TR8,9	2730025010	2SC461 (B)	Transistor
R9,38	2410346019	RD14B2E223JF	22 Kohm 1/4W Carbon Film Resistor	TR10	2730021043	2SC458 (D)	Transistor
R10,50,52,54	2410326013	RD14B2E332JF	3.3 Kohm 1/4W Carbon Film Resistor	D1,2,4,5,6,7,8,9,10	2760002029	IN60	Diode
R13,15,19	2410290013	RD14B2E101JF	100 Ohm 1/4W Carbon Film Resistor	D3	2760065008	AW01-12	Diode
R14	2410266018	RD14B2E100JF	10 Ohm 1/4W Carbon Film Resistor	D11	2760158025	W06C	Diode
R25,26,27,28,34,56	2410334018	RD14B2E682JF	6.8 Kohm 1/4W Carbon Film Resistor				

ETC-81 WIRING DIAGRAM



ETC-81 AUDIO AMP UNIT



ETC-81 AUDIO UNIT PARTS LIST

Ref. No.	Part No.	Part Name	Remarks
C1,2	2531053016	CK45E2H103PF	0.01μF 500V Ceramic Capacitor
C3,7,8,12	2531024016	CK45F1H103ZF	0.01μF 50V Ceramic Capacitor
C4	2544053016	CE04W1H471*F	470μF 50V Electrolytic Capacitor
C5	2544021019	CE04W1C471*F	470μF 16V Electrolytic Capacitor
C6	2544039014	CE04W1V221*F	220μF 35V Electrolytic Capacitor
C9,10	2544017010	CE04W1C470*F	47μF 16V Electrolytic Capacitor
C11,33	2544018019	CE04W1C101*F	100μF 16V Electrolytic Capacitor
C13,14	2544043013	CE04W1HR47*F	0.47μF 50V Electrolytic Capacitor
C15,16	2551103014	CQ93M1H224MF	0.22μF±20% 50V Plastic Film Capacitor
C17,18,55,56	2544023017	CE04W1E3R3*F	3.3μF 25V Electrolytic Capacitor
C19,20,30,31,49,50,57	2544044012	CE04W1H010*F	1μF 50V Electrolytic Capacitor
C21,22,51,52	2544008016	CE04W1A330*F	33μF 10V Electrolytic Capacitor
C23,24,29	2544055001	CE04W1H2R2*F	2.2μF 50V Electrolytic Capacitor
C25	2544020010	CE04W1C331*F	330μF 16V Electrolytic Capacitor
C26,38	2544031012	CE04W1E471*F	470μF 25V Electrolytic Capacitor
C27	2551080014	CQ93M1H473KF	0.047μF±20% 50V Plastic Film Capacitor
C28	2556091008	CQ09S1H471J	470PF±5% 50V Plastic Film Capacitor
C32	2545016010	CA92F1ER22MF	0.22μF±20% 25V Aluminum Solid Electrolytic Capacitor
C34	2544019018	CE04W1C221*F	220μF 16V Electrolytic Capacitor
C35	2533621019	CC45SL1H560JF	56PF±10% 50V Ceramic Capacitor
C36,43,44,45,46,61	2544015012	CE04W1C100*F	10μF 16V Electrolytic Capacitor
C37	2544028012	CE04W1E101*F	100μF 25V Electrolytic Capacitor
C39,40,47,48,53,54	2551130045	CQ93M1H104JF	0.1μF±5% 50V Plastic Film Capacitor
C41,42	2554076009	CQ92P2A102G	0.001μF±2% 100V Plastic Film Capacitor
C58	2551130003	CQ93M1H473JF	0.047μF±5% 50V Plastic Film Capacitor
C59,60	2545020019	CA92F1E010MF	1μF±20% 25V Aluminum Solid Electrolytic Capacitor
C63,64	2551120026	CQ93M1H152J	0.0015μF±5% 50V Plastic Film Capacitor
C65,66	2544015009	CE04W1C100*	10μF 16V Electrolytic Capacitor
R1,40	2410310016	RD14B2E681JF	680 Ohm±5% 1/4W Carbon Resistor
R2	2410316010	RD14B2E122JF	1.2 Kohm±5% 1/4W Carbon Resistor
R3	2410328011	RD14B2E392JF	3.9 Kohm±5% 1/4W Carbon Resistor
R4,5,19,20	2410332010	RD14B2E562JF	5.6 Kohm±5% 1/4W Carbon Resistor
R6,31,32,83,84	2410334018	RD14B2E682JF	6.8 Kohm±5% 1/4W Carbon Resistor
R11,12	2410290013	RD14B2E101JF	100 Ohm±5% 1/4W Carbon Resistor
R13,14	2410374010	RD14B2E334JF	330Kohm±5% 1/4W Carbon Resistor
R15,16	2420193016	RC05GF2E155KF	1.5 Mohm±10% 1/4W Carbon Resistor
R17,18	2410348017	RD14B2E273JF	27 Kohm±5% 1/4W Carbon Resistor
R21,22,35,36,37,38,45,69,70,79,80	2410314012	RD14B2E102JF	1 Kohm±5% 1/4W Carbon Resistor
R23,24,25,26	2410366015	RD14B2E154JF	150 Kohm±5% 1/4W Carbon Resistor
R27,28,41,77,78	2410362019	RD14B2E104JF	100 Kohm±5% 1/4W Carbon Resistor
R29,30	2410253018	RD14B2H684JF	680 Kohm±5% 1/2W Carbon Resistor
R33,34	2410293010	RD14B2E131JF	130 Ohm±5% 1/4W Carbon Resistor
R39,75,76	2410330012	RD14B2E472JF	4.7 Kohm±5% 1/4W Carbon Resistor
R42,87,91	2410342013	RD14B2E153JF	15 Kohm±5% 1/4W Carbon Resistor
R43	2410336016	RD14B2E822JF	8.2 Kohm±5% 1/4W Carbon Resistor
R44,90	2410346019	RD14B2E223JF	22 Kohm±5% 1/4W Carbon Resistor
R46,62,88,95,97	2410358010	RD14B2E683JF	68 Kohm± 5% 1/4W Carbon Resistor
R47	2410270017	RD14B2E150JF	15 Ohm±5% 1/4W Carbon Resistor
R48,101,102	2410340015	RD14B2E123JF	12 Kohm±5% 1/4W Carbon Resistor
R49	2410303010	RD14B2E361JF	360 Ohm±5% 1/4W Carbon Resistor
R51,52	2412012079	RD14B2E513G	51 Kohm±2% 1/4W Carbon Resistor
R53,54	2410347018	RD14B2E243JF	24 Kohm±5% 1/4W Carbon Resistor
R55,56	2410349016	RD14B2E303JF	30 Kohm±5% 1/4W Carbon Resistor
R57,58,68,93	2410323016	RD14B2E242JF	2.4 Kohm±5% 1/4W Carbon Resistor
R59,60	2410326013	RD14B2E332JF	3.3 Kohm±5% 1/4W Carbon Resistor
R61,94	2410370014	RD14B2E224JF	220 Kohm±5% 1/4W Carbon Resistor
R63,64	2410337015	RD14B2E912JF	9.1 Kohm±5% 1/4W Carbon Resistor
R65,66	2410322017	RD14B2E222JF	2.2 Kohm±5% 1/4W Carbon Resistor
R67	2410321018	RD14B2E202JF	2.0 Kohm±5% 1/4W Carbon Resistor
R71,72	2410378016	RD14B2E474JF	470 Kohm±5% 1/4W Carbon Resistor
R73,74	2410376018	RD14B2E394JF	390 Kohm±5% 1/4W Carbon Resistor
R81,82	2410341014	RD14B2E133JF	13 Kohm±5% 1/4W Carbon Resistor
R85,98,103	2410338014	RD14B2E103JF	10 Kohm±5% 1/4W Carbon Resistor
R86	2410318018	RD14B2E152JF	1.5 Kohm±5% 1/4W Carbon Resistor
R89	2410294019	RD14B2E151JF	150 Ohm±5% 1/4W Carbon Resistor
R92	2410298015	RD14B2E221JF	220 Ohm±5% 1/4W Carbon Resistor
R96	2410343012	RD14B2E163JF	16 Kohm 5% 1/4W Carbon Resistor
R99,100	2410304019	RD14B2E391JF	390 Ohm 5% 1/4W Carbon Resistor
R104,105,106,107	2410277010	RD14B2E300JF	30 Ohm 5% 1/4W Carbon Resistor
	2220202107	P.C Board	Printed Circuit Board
	4120222104	Control Bracket	
	2034013003	3P Connector Pin Ass	
	2030029004	4P Connector Base	
	2038004005	5P Connector Base	
	2030028005	6P Connector Base	
	2120058008	Rotary Switch	For Meter Selector
	2120057009	Rotary Switch Fo	For Function
	2120056000	Rotary Switch	For Ext Att
	2124029101	Lever Switch	For Muting, Hi Blend
	2320013005	Low Pass Filter	
	EP-5870	Fuse Holder	
	EP-71321	Fuse 0.63A	
	EP-71325	Fuse 1.6A	

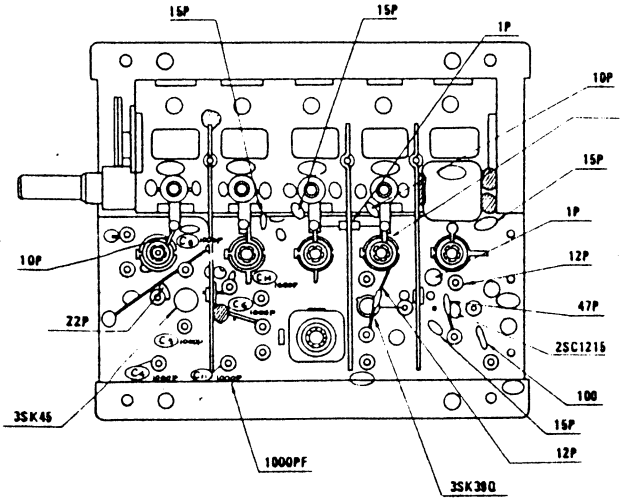
Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
IC1	2630052002	HA-1196	Integrated Circuit	D5,6,7,8	2760002029	IN60	Diode
FET1,2	2750007021	2SK 40 (C)	Field Effect Transistor	D9	2760049011	IS 2076A	Diode
TR1	2740043008	2SD 476 (C)	Transistor	RL1	2140015005	Reed Reray	Diode
TR2,7,8,9, 10	2730116013	2SC 1345 (E)		VR1,2	EP-5462H15	Solid Volume	B-22 Kohm Variable Resistor
				VR3,4	EP-5462H11	Solid Volume	B-4.7 Kohm Variable Resistor
TR3	2730111021	2SC 1213 (C)	Transistor	VR5	EP-5462H13	Solid Volume	B-10 Kohm Variable Resistor
TR4	2730021030	2SC 458 (C)	Transistor	VR6	EP-5462H23	Solid Volume	B-470 Kohm Variable Resistor
TR5,6	2730021043	2SC 458 (D)	Transistor	RB1,2	2462001001	RK923-2B	Resistor Block
TR12,13	2710063005	2SA 836 (D)	Transistor	RB3,4	2462002000	RK924-2B	Resistor Block
D1,2,3	2760166017	RA-1Z	Diode		2062008006	AC Cord With Plug	For Australia
D4	2760178005	MZ-312B	Diode				

GE-0005-1 CHASSIS & CABINET GROUP

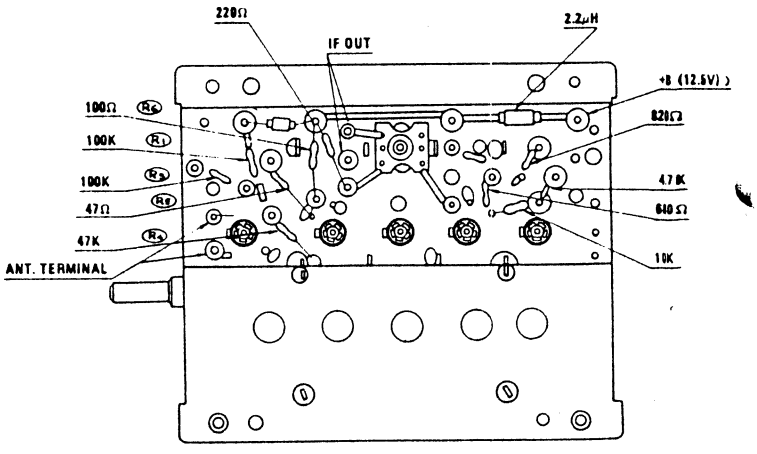
Ref. No.	Part No.	Part Name	Remarks	Ref. No.	Part No.	Part Name	Remarks
	1020022038	Top Cover			2150016117	Level Meter (L) Ass	
	4770064107	Fixing Screw	For Top Cover, Bottom Cover		3939007201	Lamp Ass	Meter Select Indicator Lamp
	1050089106	Bottom Cover Ass			2220196006	P.C Board	For Stereo Indicator Lamp
	1440152203	Front Panel Ass			3930024001	P L 6.3V 0.075A	Stereo Indicator Lamp
	1220076104	Tuning Knob Ass			2034080081	3P Connector Cord	For Stereo Indicator Lamp
	1120078102	Function Knob Ass			2220212100	P C Board	For Level Meter (R), (L) Ass, Tuning Meter
	1120080103	Knob Ass	External Att, Meter Selector		3930026009	P L 8V 0.2A	For Level Meter (R), (L) Drum, Tuning Meter Illumination
	1130034000	Lever Knob	For Power, Muting, High Blend Switch				
	1190005011	Blind Sheet	For Lever Knob		2150015105	Tuning Meter Ass	
	4100051308	Dial Chassis Ass			2220213002	P C board	For Drum Lamp
	4210119004	Guide Wheel			2020012005	Fuse Holder	For AC line Fuse
	SC-1161	Tapping Screw	For Guide Wheel		2061015003	Fuse 0.5A (Time Lag)	AC Line Fuse
	MD-0131J	Guide Wheel			2062002002	AC Cord With Plug	
	4200053109	Driving Shaft Ass			4450020005	Cord Bush	For AC Cord
	4100060205	G.W Bracket (A) Ass			2050019201	4P Terminal	Antenna Terminal
	4100061107	G.W Bracket (C) Ass			4714304030	3 x 8 CTS	For Antenna Terminal
	4220068103	Dial Shaft			EP-71141	Push Terminal	For Speaker Terminal
	WA-0733	Spacer			2335026003	Power Trans Ass	
	4210024209	Drum Wheel			2160009004	FM Front End Ass	
	WA-0728	E-Ring			4730356033	3 x 12 CRTS (2)	For Front End
	4756013004	6N			4430113000	Stay	For Front End
	S-2680	Tension Spring			2042009009	4P Connecting Base	Out Put Terminal
	4230011001	String	φ0.55 Tetlon		E-9843H	Fix Plate	For Out Put Terminal
	4520022001	Dial Drum			2040052003	3P Connector base	Det Out, Multi Path, Out Put Terminal
	4210023200	Dial Wheel			2110087005	V2420N10SA503	A-50 Kohm Level Adjust
	4110071404	Front Chassis Ass			2032055005	Coaxial Connector	75 Ohm Antenna Connector
	4140063000	Blind			2310017008	Balun Trans	
	4110056306	IF Chassis			2034083004	3P Connector Cord	For Front End
	4732355032	3 x 10 CFTS (2)			2034084003	3P Connector Cord	For Det Out, Multi Path
	4510010007	Lamp Bracket			2034084003	3P Connector Cord	For Ext In Put Terminal
	4510011103	Reflector Bracket			2034080052	3P Connector Cord	For Level Meter (R), (L), Tuning Meter Drum, Lamp
	1020037104	Back Cover			2034080065	3P Connector Cord	For Tuning Meter
	4530006004	Filter (A)	Blue Collar Filter For Level Meter (R), (L), Tuning Meter Illumination		2036041015	4P Connector Cord	For Level Meter (R), (L)
					2038035016	6P Connector Cord	For A-50 Kohm Level Adjust
	4530007003	Filter (B)	Blue Collar Filter For Drum Illumination		2040031024	6P Connector Cord	For Out Put Terminal
					MD-4368		
	4610066139	Rubber Sheet			2124047002	Slide Switch	Voltage Selector
	4610066126	Rubber Sheet			4120297003	Bracket	For Voltage Selector
	1460027103	Dial Window (C) Ass		C1,2	2518001007	CP05C**AC103MC	0.01μF ±20%, 450VAC Oil Capacitor
	2124072006	Lever Switch	For Power Switch				For Power Switch
	2150016104	Level Meter (R) Ass		R1	2440064002	RS14B3D1R5JNB	1.5 Ohm ±5% 2W Metal Oxide Resister

THE VIEW OF THE FRONT END (216000904)

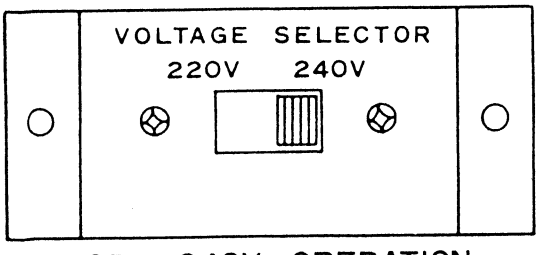
TOP VIEW



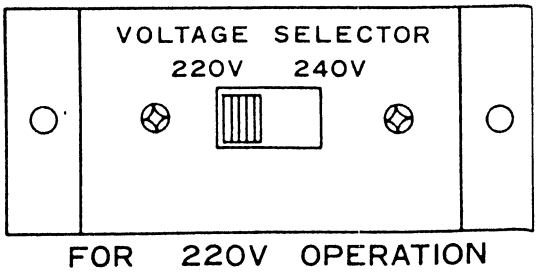
BOTTOM VIEW



VOLTAGE CHANGEROVER



FOR 240V OPERATION



FOR 220V OPERATION

METHOD OF ADJUSTMENTS

STEP	ITEM	TUNER DIAL SETTING	SIGNAL GENERATOR					INDICATOR		ADJUST	ADJUST LIMITS	REMARKS
			TYPE	FREQ	TUNER INPUT LEVEL	MODULATION	COUPLING	TYPE	CONNECTED TO			
1.	IF	98MHz	FM SG	98MHz	60dB/μV	CW	Through dummy ant. to 300 ohms ant. terminals	Signal strength meter		Top (sec.) and bottom (pri.) of T101 on front end unit. (2160009004)	Maximum signal strength meter	In following adjustments, specification of FM signal generator & stereo modulator have to warrant less than 0.1% distortion and more than 50dB stereo separation at 1 kHz.
2.	Detector	Point of no interference & station	Same		Received FM noise		Same	Tuning meter		Top (sec.) of T201 on IF unit (HUX-003A)	Center point of tuning meter	
3.	Dial calibration	108MHz	Same	108MHz	60dB/μV	400Hz ±75kHz deviation	Same	Same		OSC. trimmer Tc105 on front end unit (2160009004)	Same	Repeat step 3 and 4, until dial indicates within ±50kHz at 88MHz and 108MHz. Also check accuracy of other frequency reading.
4.	Same	88MHz	Same	88MHz	Same	Same	Same	Same		OSC, coil L105 on front end unit (2160009004)	Same	
5.	Tracking	108MHz	Same	108MHz	Same	Same	Same	Signal strength meter		Tc, 101, 102, 103, 104 on front end unit (2160009004)	Maximum signal strength meter	
6.	Same	88MHz	Same	88MHz	Same	Same	Same	Same		L101, 102, 103, 104 on front end unit (2160009004)	Same	
7.	Monoural distortion	Same	Same	98MHz	Same	1000Hz ±75kHz deviation	Same	Distortion meter A.C. V.M. oscilloscope	Fixed output R-channel	Bottom (pri.) of T201 on IF unit (HUX-003A)	Minimum distortion	
8.	Audio output level	Same	Same	Same	Same	400Hz ±75kHz deviation	Same	Same	Same	VR.202 on IF unit (HUX-003A)	1.13V.	
9.	Same	Same	Same	Same	Same	Same	Same	Same	Fixed output L-channel	VR.307 on Audio unit (ETC-81A)	1.13V.	

STEP	ITEM	TUNER DIAL SETTING	SIGNAL GENERATOR					INDICATOR		ADJUST	ADJUST LIMITS	REMARKS
			TYPE	FREQ	TUNER INPUT LEVEL	MODULATION	COUPLING	TYPE	CONNECTED TO			
10.	P.L.L.19kHz	Same	Same	Same	Same	Same	Same	Frequency counter	TP301	VR.305 on Audio unit (ETC-81A)	76kHz ±100Hz.	IF distortion is more than reading of 0.2%, turn top (sec.) and bottom (pri.) of T101 on front end unit (2160009004) to obtain reading of 0.15%.
11.	Stereo distortion	Same	FM SG and stereo modulator	Same	Same	Stereo modulation L-channel ± 33.75 kHz deviation pilot ± 7.5 kHz deviation	Same	Distortion meter A.C. V.M. oscilloscope	Fixed output L-channel	VR.201 on IF unit (HUX-003A)	Minimum distortion	
12.	Stereo separation	98MHz	FM SG. and stereo modulator	98MHz	60dB/μV	Stereo modulation L or R-channel ± 33.75 kHz deviation Pilot ± 7.5 kHz deviation	Through dummy ant. to 300 ohms ant. terminals	Distortion meter A.C.V.M. oscilloscope	Fixed output L or R-channel	VR.306 on Audio unit (ETC-81A)	Maximum separation	Check to alternate both channels
13.	Muting coil	98MHz	Same	98MHz	20dB/μV	400Hz ±75kHz deviation	Same	Signal strength meter		Top (sec.) and bottom (pri.) of T202 on IF unit (HUX-003A)	Maximum signal strength meter	Set muting switch to "ON" and VR.204 to minimum counter clockwise position and then turn VR.204 slowly in clockwise direction untill audio output is obtained.
14.	Muting Trigger level	Same	Same	Same	Same	Same	Same	L or R-channel level meter		VR.204 on IF unit (HUX-003A)	Trig. on audio output	
15.	Signal strength meter	Same	Same	Same	60dB/μV.	400Hz 22.5kHz deviation	Same	Signal strength meter		VR.203 on IF unit (HUX-003A)	0dB point	Turn to obtain reading of 0dB (100%) on the signal strength meter.
16.	Level meter		Audio oscillator 1,000Hz		0.775V		L and R-channel external input terminals	L and R-channel level meter		VR.303 and VR.304 on AUDIO unit (ETC-81A)	Adjust for 0dB both channels	Set meter selector switch to "External" and external att. to 0dB position.
17.	Tuner output level setting	98MHz	FM SG.	98MHz	60dB/μV	400Hz ±75kHz deviation	Through dummy ant. to 300 ohms ant. terminals	L and R-channel level meter		VR.301, and VR.302 on AUDIO unit (ETC-81A)	Adjust for +2.3dB both channels	Set meter selector switch to "Level"

MODEL TU-355 WIRING DIAGRAM